CLAIMS

What is claimed is

1.   An apparatus for measuring noise, comprising:

a block average calculator dividing individual pictures of an input image signal into blocks and calculating average luminance values for a plurality of the divided blocks;

a delay separately delaying the pictures of the input image signal by one period;

an SAD calculator calculating an absolute difference between an average luminance value of a present picture and an average luminance value of a picture of the image signal delayed by the delay; and

a picture noise selector selecting a desired number-th arranged absolute difference, of a plurality of calculations from the SAD calculator for the input image signal, as a picture noise when absolute differences calculated by the SAD calculator are arranged, in turn, from a smallest value toward a largest value.

2.   The apparatus of claim 1, further comprising a comparator comparing whether the average luminance value calculated by the block average calculator is within a desired range, wherein the SAD calculator calculates the absolute difference upon the comparator determining that the average luminance value is within the desired range.

3.   The apparatus of claim 2, further comprising a regional noise selector selecting a desired arranged number-th picture noise as a regional noise when picture noises selected from pictures of the image signal in a desired region are arranged, in turn, from a smallest one toward a largest one.

4.   The apparatus of claim 2, wherein the picture noise selector selects a second absolute difference as the picture noise.

5.   The apparatus of claim 3, wherein the regional noise selector selects a second picture noise as the regional noise.

6.   A method of measuring noise, comprising:

dividing a picture of an input image signal into a desired number of blocks;

calculating an average luminance value for each divided block;

delaying the picture of the image signal by one period;

calculating an absolute difference between the average luminance value of the picture and an average luminance value of a previous delayed picture of the image signal; and

selecting a desired arranged number-th absolute difference as a picture noise when calculated absolute differences are arranged, in turn, from a smallest value toward a largest value.

7.   The method of claim 6, further comprising comparing whether the calculated average luminance value is within a desired range, and further comprising calculating a corresponding absolute difference upon determining that the average luminance value is within the desired range.

8.   The method of claim 7, further comprising selecting an arranged desired number-th picture noise as a regional noise when selected picture noises in a desired region are arranged, in turn, from a smallest one toward a largest one.

9.   The method of claim 7, wherein the selecting of the picture noise comprises selecting a second absolute difference as the picture noise.

10.   The method of claim 8, wherein the selecting of the regional noise comprises selecting a second picture noise as the regional noise.

11. A method of measuring noise, comprising:

calculating an absolute difference between an average luminance value of a block of pixels of a first picture of an image signal and an average luminance value of a block of pixels of a second picture of the image signal; and

selecting a calculated absolute difference of a plurality of calculated absolute differences as a picture noise.

12. The method of claim 11, wherein the second picture is a picture sequentially next to the first picture in the image signal.

13. The method of claim 11, wherein the selecting of the calculated absolute difference includes selecting a desired arranged number-th absolute difference as a picture noise from an arrangement of the plurality of calculated absolute differences.

14. The method of claim 13, wherein the plurality of calculated absolute differences are arranged, in turn, from a smallest value toward a largest value

15. The method of claim 14, wherein the calculated absolute difference is selected to be the secondly arranged calculated absolute difference.

16. The method of claim 11, wherein the calculating of the absolute difference is only performed upon determining that an average luminance value is within a desired range.

17. The method of claim 11, wherein the selecting of the calculated absolute difference includes selecting a desired arranged number-th absolute difference as a regional noise from an arrangement of the plurality of calculated absolute differences.

18. An apparatus for measuring noise, comprising:

an SAD calculator calculating an absolute difference between an average luminance value of a block of pixels of a first picture of an image signal and an average luminance value of a block of pixels of a second picture of the image signal; and

a picture noise selector selecting a calculated absolute difference of a plurality of calculated absolute differences as a picture noise.

19.   The method of claim 18, wherein the selecting of the calculated absolute difference includes selecting a desired arranged number-th absolute difference as the picture noise from an arrangement of the plurality of calculated absolute differences.

20.   The method of claim 19, wherein the plurality of calculated absolute differences are arranged, in turn, from a smallest value toward a largest value

21.   The method of claim 20, wherein the calculated absolute difference is selected to be the secondly arranged calculated absolute difference.